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EXAMINER				
SALVATORE, LYNDIA				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/521,169

**Applicant(s)**

IWASHITA, KENJI

**Examiner**

LYNDA M. SALVATORE

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4 and 6-15 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6-8 and 11-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. Applicant's amendment and accompanying remarks filed 6/16/08 have been fully considered and entered. Claims 1, 4, 8, 11-12 and 14 have been amended and claims 2-3 and 5 have been canceled as requested. Upon further consideration, Applicant's amendments are not found patently distinguishable over the prior art made of record for reasons set forth herein below.

***Claim Rejections - 35 USC § 102/103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1, 7, 11, 12 and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takenaka et al., US 5,021,283.

Applicant amended claim 1 to recite "another constituent is a copolymer polyester multifilament yarn or elastic yarn with a breaking elongation of 70-1000%". However, since Applicant claims a composite yarn with two or more constituents, the Examiner considers the teaching by Takenaka et al., to a mixed yarn comprising multi-filaments sufficient to meet the yarn limitations set forth in claim 1. Specifically, Takenaka et al., teach that the fiber material may comprise only organic fibers and are used in multi-filament form (column 6, 40-50). In addition, Takenaka et al., teach that the multi-filament can be mix-woven or one type of fiber can be used in the warp direction and other fiber can be used in the weft direction (column 7, 20-35). In addition, since both constituents constitute polyester, the Examiner considers an organic yarn

comprising only the polyester products taught by Takenaka et al., sufficient to meet the composite yarn limitations.

The patent issued to Takenaka et al., teach a multi-layer non-woven fabric comprising at least three layers of woven fabrics (abstract). With regard to the claimed bonding layer having a corrugated and wave like shape, Takenaka et al., teach combing portions of the internal layers to form cells having a shape of tetragons, hexagons or a combination thereof. It appears that figure 1 illustrates an internal corrugated or wave like shape. With regard to the fiber material, Takenaka et al., teach employing polyester fibers having a single fiber fineness ranging from .1 to 50 and a multifilament fineness ranging from 50-6000 (column 6, 50-column 7, 30). With regard to the composite yarn limitation, Takenaka et al., teach mixing organic and inorganic filaments to form multi-filaments (column 6, 32-50 and column 7, 30-35). With regard to the intermingled yarn or covering processed yarn limitation, the Examiner considers the composite yarns taught by Takenaka et al., sufficient to meet the covering processed yarn limitation. The specification does not specifically define what constitutes a "covering processed yarn". Moreover, the recited "air intermingled" and/or "covering processed yarn" limitations appear to constitute how the yarn is formed (e.g., method and/or process limitations), which is not germane to the woven fabric structure. In other words, said limitations do not appear to materially effect the woven fabric structure. Applicant is invited to prove otherwise.

With regard to the claimed air permeability property set forth in claims 7, 11, 12 and 14, the prior art of Takenaka et al., fails to teach the claimed air permeability. However, it is reasonable to presume that said air permeability property is inherent to the invention of Takenaka et al. Support for said presumption is found in the use of like materials such as polyester

filaments and the use of like process such as forming a three dimensional multi-layer woven fabric, which would result in the claimed property. The burden is shifted to Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594

In addition, the presently claimed air permeability property would obviously have been present once the Takenaka et al., product is provided. *In re Best*, 195 USPQ 433

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takenaka et al., US 5,021,283 as applied to claim 1 above.

Takenaka et al., does not teach the claimed distance between the hills and valleys of the bonding layer, however, it is the position of the Examiner that it would be obvious to one having ordinary skill in the art to optimize the distance between the hills and valleys as a function of desired loft and three-dimensional properties. It has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215

With regard to the claimed air permeability property set forth in claim 15, the prior art of Takenaka et al., fails to teach the claimed air permeability. However, it is reasonable to presume that said air permeability property is inherent to the invention of Takenaka et al. Support for said presumption is found in the use of like materials such as polyester filaments and the use of like process such as forming a three dimensional multi-layer woven fabric, which would result in the claimed property.

***Allowable Subject Matter***

6. Claims 4 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Specifically, the prior art fails to teach the claimed hygroscopic yarn.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LYNDA M. SALVATORE whose telephone number is (571)272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 15, 2008  
Art Unit 1794

/Lynda Salvatore/  
Primary Examiner

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